Abstract Submitted
for the DAMOP07 Meeting of
The American Physical Society

Electronic Noise in Optical homodyne Tomography DALLAS HOFFMAN, JURGEN APPEL, EDEN FIGUEROA, ALEX LVOVSKY, IQIS U of C, IQIS U OF C TEAM — In experiments on homodyne tomography of light, the electronic noise of the detector often prevents the observation of the fine details of the quantum state's marginal distributions. We have shown that the noise contribution from the detector can be modeled by an equivalent inefficiency arising due to optical loss. We confirm this result using a non-classical squeezed light produced with an optical parametric amplifier.

Dallas Hoffman
IQIS U of C

Date submitted: 05 Feb 2007 Electronic form version 1.4